




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,030	05/28/2002	Michael Jon Gustafson	758.1012USWO	4536
23552	7590	06/24/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			JENKINS, JERMAINE L	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,030	Applicant(s) GUSTAFSON ET AL.	
	Examiner Jermaine Jenkins	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 35 & 37 are objected to because of the following informalities: Claim 35 is missing or misnumbered (See claim 36). Claim 37 is an improper dependent claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverwater (4,651,670) in view of Ludwig et al (6,265,866).

In regards to claims 26, 32, 34, 36-38, 44, 45, 48-50 & 53-58, Silverwater teaches a differential pressure indicating device (Abstract) having a housing defining a cavity (103, being read as a bore), a member (104, being read as a piston) dividing the cavity (103) into first and second chambers (105, 106), (Column 3, lines 30-35) at least a portion of the member (104) being movable within the cavity (103) and along an axis (Column 4, lines 40-51), a magnet (136) operably connected to the member (104), the magnet (136) generating a magnetic field (Column 4, lines 52-63). However Silverwater does not teach a hall-effect sensor, the hall effect sensor having a surface, the hall-effect

Art Unit: 2855

sensor outputting a voltage in response to the magnetic field exerting a force through the surface of the hall-effect sensor, the surface being parallel to the axis.

Ludwig et al teaches a measuring device having a programmable hall-effect sensor (4) having a surface and outputting a voltage in response to the magnetic field exerting a force through the surface of the hall-effect sensor (Column 2, lines 31-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a programmable hall-effect sensor as taught by Ludwig et al in the pressure measuring device of Silverwater for the purpose of eliminating the conversion of analog signals to digital processing signals (Ludwig et al; Column 3, lines 59-62).

With respect to claims 27 & 39, Silverwater teaches the magnet (136) is positioned within the cavity (103) (Column 4, lines 55-61).

With respect to claims 28 & 40, Silverwater teaches the magnet (136) is connected directly to the member (104) (Column 4, lines 52-55).

With respect to claims 29 & 41, Silverwater teaches the member (104) is formed with the magnet (136) (Column 4, lines 52-55).

With respect to claims 30, 31, 42 & 43, Silverwater teaches wherein the member (104) is slidably positioned within the cavity (103) (Abstract; Column 17, line 7), and wherein the member is a piston (204) including a sleeve (276, being read as a slide) and the magnet (276) is at least partially within the sleeve (276) (Column 9, lines 53-65).

With respect to claims 33 & 47, Silverwater teaches a filter housing defining a filter chamber; a filter (116) positioned within the filter chamber, the filter having first and second portions, the first portion being in fluid communication with the first pressure

Art Unit: 2855

chamber, and the second portion being in fluid communication with the second pressure chamber (Column 3, lines 59-63; Column 6, lines 43-47).

With respect to claims 51 & 52, Ludwig et al teaches a circuit electrical communication with the hall-effect sensor (4), the hall-effect sensor (4) and at least a portion of the circuit being molded into a single unit (1), and wherein the circuit includes a connector (represented by arrows in Figure 1), the hall-effect sensor (4) and the circuit being molded into a single unit (1) (See Figure 1).

Response to Arguments

3. Applicant's arguments with respect to claims 26-58 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

Art Unit: 2855


advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 571-272-2179. The examiner can normally be reached on Monday-Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermaine Jenkins
A.U. 2855


EDWARD LEFKOWITZ
SUPERVISOR, PATENT EXAMINER
TECHNOLOGY CENTER 2800